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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,981	01/17/2001	David K. Swanson	15916-282	5761

7590

01/26/2004

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EXAMINER

VRETTAKOS, PETER J

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 01/26/2004

31

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/761,981

Applicant(s)

SWANSON, DAVID K.

Examiner

Peter J Vrettakos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 28-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 28-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 27,30.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The following action is **final**. New rejections are presented below in response to Amendment C dated 1-7-04 in which substantive changes were made to existing claims.

A typographical error is found in claim 8. The claim currently depends upon itself. Correction is required.

Claims 35-57 are newly added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-7, 9, 28-30, 35-36, 49-51 and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bednarek ('706) in view of Saadat ('115).

Bednarek discloses a surgical probe (10) comprising:

A short and malleable (col. 10:44-47) shaft (14);

a plurality of energy transmission devices / electrodes (col. 4:22-25);

and a tissue cooling apparatus (col. 10:9-24) with a porous structure / fluid transmission space (22).

Bednarek does not disclose a drainage tube.

Saadat discloses in an analogous device, a drainage tube (40).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify Bednarek in view of Saadat by including a drainage tube. The motivation would be prevent saline/conductive fluid build-up at the surgical cite.

2. Claims 1-9, 28-36, and 49-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaFontaine et al. ('872) in view of Tu et al. ('140) and further in view of Saadat.

LaFontaine et al. discloses a surgical device that includes a malleable relatively short catheter shaft (14), a handle (12), an energy transmission device or electrode (38,89), and a tissue cooling apparatus or outer member (78) contains the fluid transmission space, which comprises fluid inlets (92) and outlets (96).

LaFontaine et al. also discloses a conductive fluid source (24) and supply line (26).

The tissue cooling apparatus is made up of a microporous structure (80), Surlyn or Latex. Note column 14 lines 61-63. The microporous structure or expandable member (80) also covers or envelops the energy transmission device (89). Note figure 5. The examiner asserts that the fluid transmission space is the empty area that makes up the inside of the bulbous tip of the expandable member (80) in figure 5.

Re: claims 7 and 8, LaFontaine discloses that the expandable member (80) in figure 5 can be constructed to form any desired configuration upon expansion (col. 15:4-7, and 60-64). The examiner contends that through routine experimentation one could easily deduce an annular expandable member configuration (and consequently a fluid transmission space that is annular) as determined by the tissues being treated. The annular configuration is common in the art – see Edwards 5,569,241 figure 5 element 34.

Re: claims 28-30, see figure 5.

Re: claims 31-32, and 57, optimal dimensions (diameters) would be determined through routine experimentation.

LaFontaine et al., which has been described above, neglects to disclose a plurality of spaced energy transmission devices and coil electrodes.

Tu et al. discloses a tissue ablation device that discloses a plurality of spaced energy transmission devices (14, col. 6:33-34) and coiled (and thereby relatively flexible, col. 6:34-36) electrodes.

A tissue cooling apparatus is asserted (2). Note column 4 lines 9-15. Outlet ports (21) are provided to allow the cooled fluid, which surrounds the electrode, exit from the catheter and onto the tissue.

Tu et al. discloses a relatively short catheter shaft (1), two electrodes (14,12), a tissue cooling apparatus (2), an inlet lumen (20), and an outlet lumen or port (21). The

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examiner designates the fluid transmission spaces as the regions of lumen 20 in figure 3 that run perpendicular to the longitudinal axis of the catheter.

Tu and LaFontaine do not disclose a drainage tube.

Saadat discloses in an analogous device, a distal drainage tube (40).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify LaFontaine et al. in view of Tu et al. by including more than one energy transmitting device. The motivation would be provide more precise means through selective activation for applying energy to targeted tissue.

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify LaFontaine in view of Tu and further in view of Saadat by including a drainage tube. The motivation would be prevent saline/conductive fluid build-up at the surgical cite.

3. Claims 37-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaFontaine et al. ('872) in view of Tu et al. ('140) and further in view of Swanson et al. ('903).

Lafontaine and Tu neglect to disclose an outer member that permits ionic transfer while preventing fluid perfusion.

Swanson in an analogous device discloses an outer member that permits ionic transfer while preventing fluid perfusion (col. 10:48-64).

Claims 38-48 each contain the same limitations from claims rejected in rejection #2 above toward Lafontaine and Tu and are applied in the same manner as before. Swanson is only needed in the instant rejection for the limitation in independent claim 37 toward an outer member that permits ionic transfer while preventing fluid perfusion.

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify LaFontaine in view of Tu and further in view of Swanson by disclosing an outer member that permits ionic transfer while preventing fluid perfusion. The motivation would be provide a device that facilitates RF ablation through ionic transfer onto the targeted tissue, while avoiding the unwanted accumulation of conductive fluid at the surgical site.

Response to Arguments

Applicant's arguments with respect to claims 1-9 and 28-34 have been considered but are moot in view of the new ground(s) of rejection.

New rejections are submitted above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

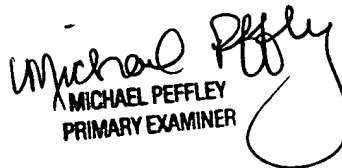
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pete Vrettakos whose telephone number is 703-605-0215. The examiner can normally be reached M-F 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 703-308-0994. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0758 for regular communications and 703-308-0758 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Pete Vrettakos
January 20, 2004



MICHAEL PEFFLEY
PRIMARY EXAMINER